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District Department of Transportation

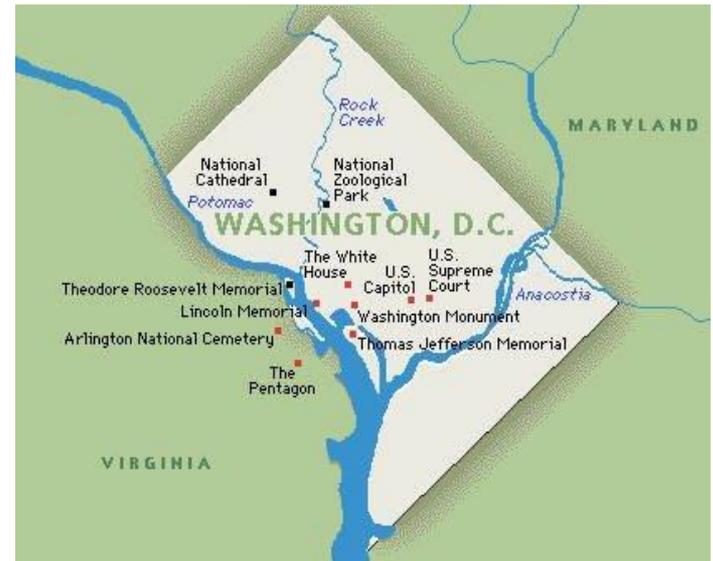
**COG Board Infrastructure Presentation**

July 9<sup>th</sup>, 2014

# District Department of Transportation (DDOT)

DDOT manages and maintains transportation infrastructure:

- Manages and makes improvements to the street system to facilitate traffic flow.
- Plan, design, constructs and maintain the District's Streets, sidewalk, bridges, tunnels, streetlights, signals, street trees and alleys.
- Manage with the Department of Public Works, the removal of snow and ice from the streets.
- Coordinates mass transit services



# District Department of Transportation

- 1,100 miles of roadways
- 241 bridges
- 66 Culverts
- 16 Tunnels
- 1,600 miles of sidewalks
- 453 miles of alleys
- 144,000 trees adjacent to city streets
- 50 miles of Bike Lane
- 64,000 Streetlights
- 1600 Signalized Intersections



# DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT) FISCAL YEARS

<b>Expenditures</b>				
(000s)				
	Federal Highway	Highway Trust Fund Match	DC Local	Total
FY10	211,499	51,542	86,650	349,691
FY11	157,388	34,240	92,983	284,611
FY12	234,787	38,830	119,434	393,051
FY13	221,587	36,379	116,983	374,949
FY14	328,833	51,874	110,049	490,756
FY15	278,441	46,507	237,925	562,873
FY16	215,669	34,703	288,579	538,951
FY17	223,231	36,018	312,181	571,430
FY18	178,297	27,228	313,605	519,130
FY19	182,685	27,779	289,525	499,989

# ROADWAY NETWORK

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TOTAL ROADWAY NETWORK: 4,346 lane miles

FEDERAL: 2,054 lane miles

LOCAL: 2,292 lane miles

*Roadway Network is one of the biggest asset for the City*



# ROADWAY NETWORK

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*Roadway Network is one of the biggest asset for the City*



# PAVEMENT MANAGEMENT

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- Pavement Condition Data is collected using state-of-the-art imaging technology on over 4300 lane miles of roadway
- Data is analyzed to determine Pavement Condition Index (PCI)



VIDEO VAN EQUIPPED WITH STATE-OF-THE-ART IMAGING TECHNOLOGY

# PAVEMENT CONDITION

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## 2013 PAVEMENT CONDITION INDEX (PCI)

<b>ROADWAY TYPE</b>	<b>Average PCI</b>
Local	61.1 (Fair)
Federal	72.3 (Good)
NHS	87.5 (Excellent)

# PAVING PROGRAM

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## 2014 PAVING PLAN

ROADWAY TYPE	MILES
Local Paving	6.3
Federal	5.9
NHS	10.8
Preservation	25.7

Major Roads include: *Florida Ave NW, Eastern Ave NE, Rhode Island Avenue NW, Independence Ave SW and Suitland Pkwy SE*

# **BRIDGES IN THE DISTRICT OF COLUMBIA**

• <i>District of Columbia Bridges:</i>	
• <i>Highway Bridges</i>	<i>205</i>
• <i>Pedestrian Bridges</i>	<i>17</i>
• <i>Tunnels</i>	<i>16</i>
• <i>Railroad Bridges (DC owned)</i>	<u><i>1</i></u>
• <i>Total DC Bridges</i>	<i>239</i>
• <i>National Park Service Bridges</i>	<i>39</i>
• <i>Railroad owned Bridges</i>	<u><i>37</i></u>
• <i>Total:</i>	<i>315</i>

**d.**



# **BRIDGE ASSET MANAGEMENT PROGRAM**

## **I) Bridge Preservation**

- 1. Bridge Rehabilitation**
- 2. Preventive Maintenance**
  - A) Cyclical (Non-condition Based activities)**
  - B) Condition Based activities**

## **II) Bridge Replacement**

## **III) New Bridges**

d.



## PROGRAM MANAGEMENT TOOLS

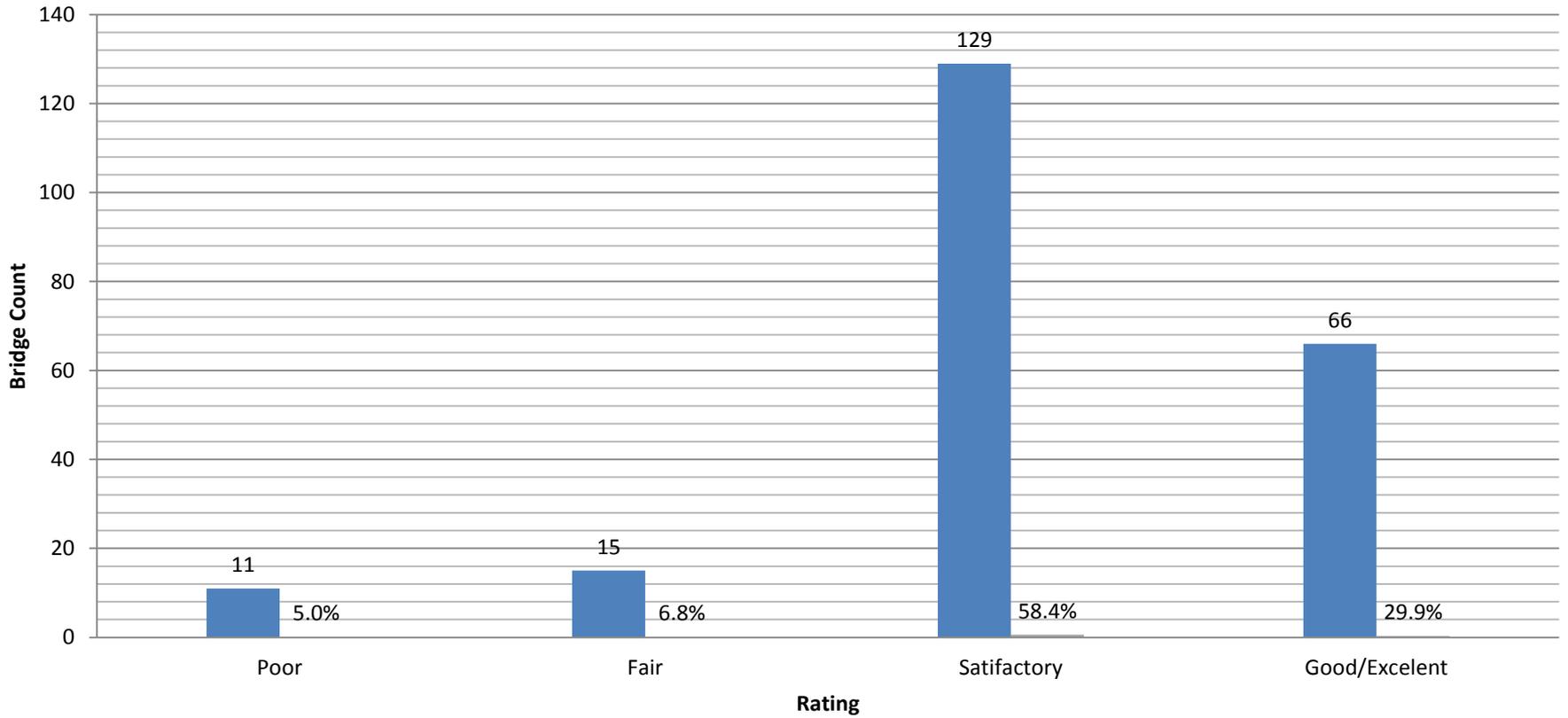
- NBI Bridge Inspection Program
- Bridge Preservation and Preventive Maintenance Contract.



d.



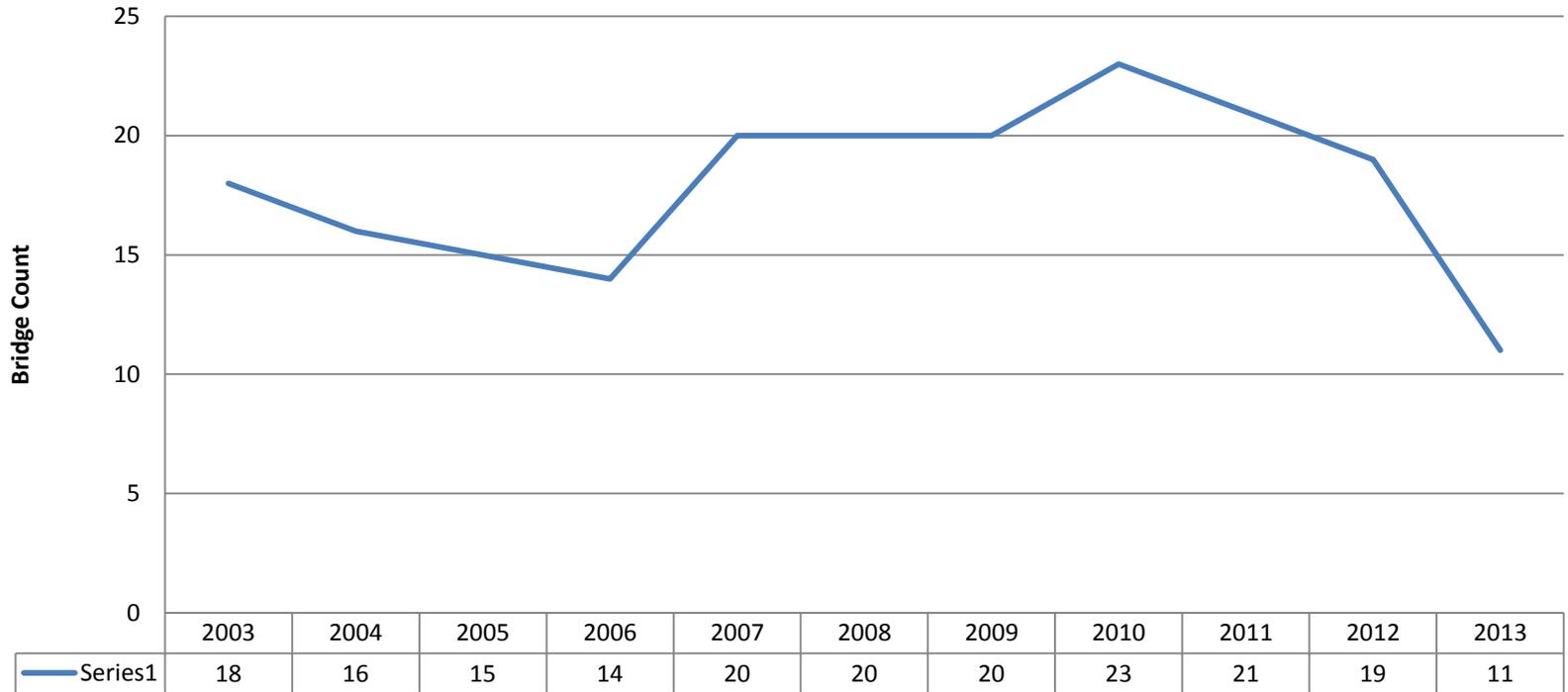
### Bridge Overall Ratings



d.



### Structurally Deficient Bridges



# Upcoming Major Projects

- 16<sup>th</sup> Street Bridge over Military Road
  - Key Bridge
  - Pennsylvania Ave. Bridge over Rock Creek
  - 31<sup>st</sup> st Bridge over C&O Canal
  - 7<sup>th</sup> Street, NW Florida to N St.
  - I-395 HOV Bridge over Potomac River
  - Theodore Roosevelt Bridge
  - U Street, NW Florida to 14<sup>th</sup> Street
  - Canal Road
  - Broad Branch Road
  - Oregon Ave.
  - Oxon Run Trail
  - East Capitol Street Bridge
- 

# Streetcar Program Overview

Design Build Operate Maintain

## H Street/Benning

- Mainline Complete for Construction and Construction Phase Testing
- Temp. Car barn nearing Completion
- Operation Phase Testing Next
- Passenger Service with Federal Certification

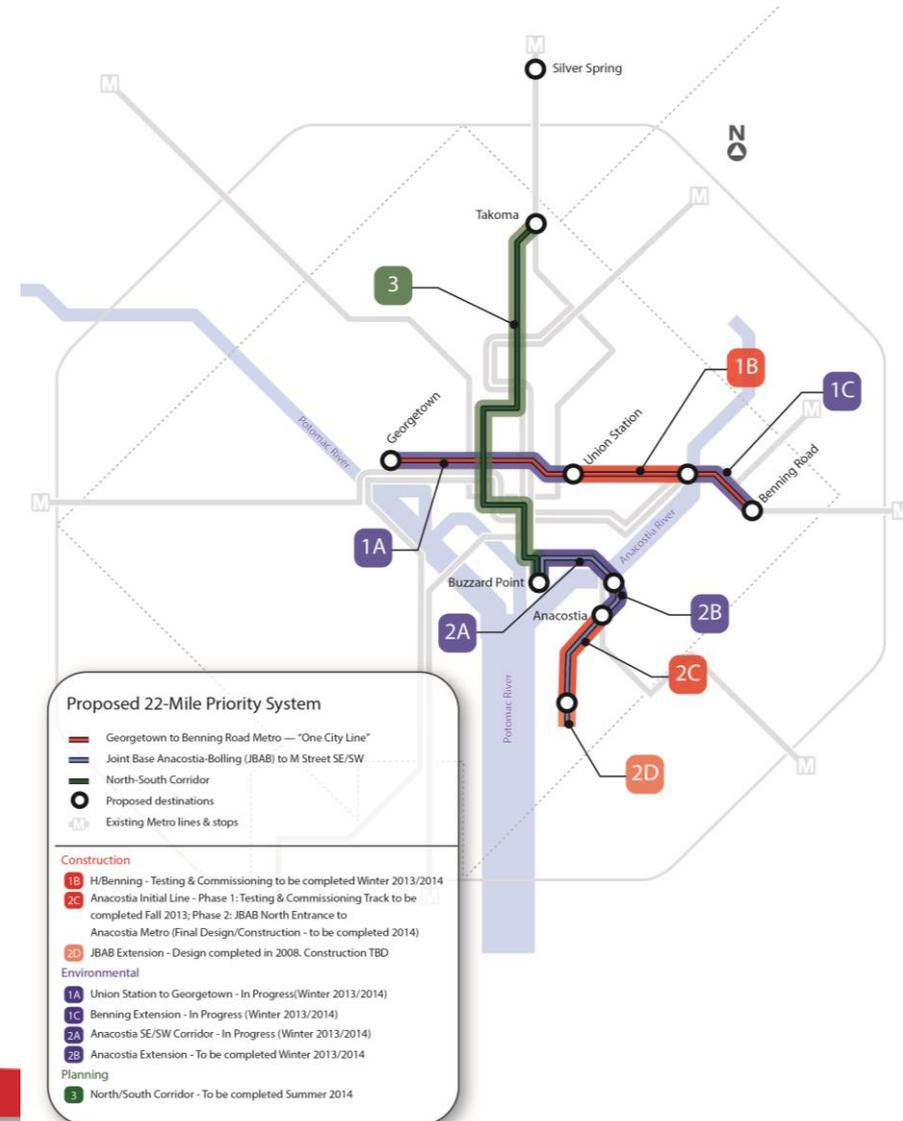
## Integrated Premium Transit (IPT) - DBOM

- 22 Mile Single and Double Track
- Design & Build: 1A, 1C & 2A
- O & M: 1B, 2B, 2C; 1A, 1C & 2A

## Streetcar Goals and Benefits

- Proven to spur economic development
- Improve Mobility & Connect All 8 wards
- Complement existing modes
- Reduce emissions and fossil fuel vehicle trips

**Red – Construction/Blue – NEPA/Green-Planning**



# South Capitol Street Corridor Project

**Goals:**

- Replace Frederick Douglass Memorial Bridge
- Transform the corridor into a grand urban boulevard
- Increase safety and community accessibility
- Improve multi-modal transportation options
- Support economic development

**Status:**

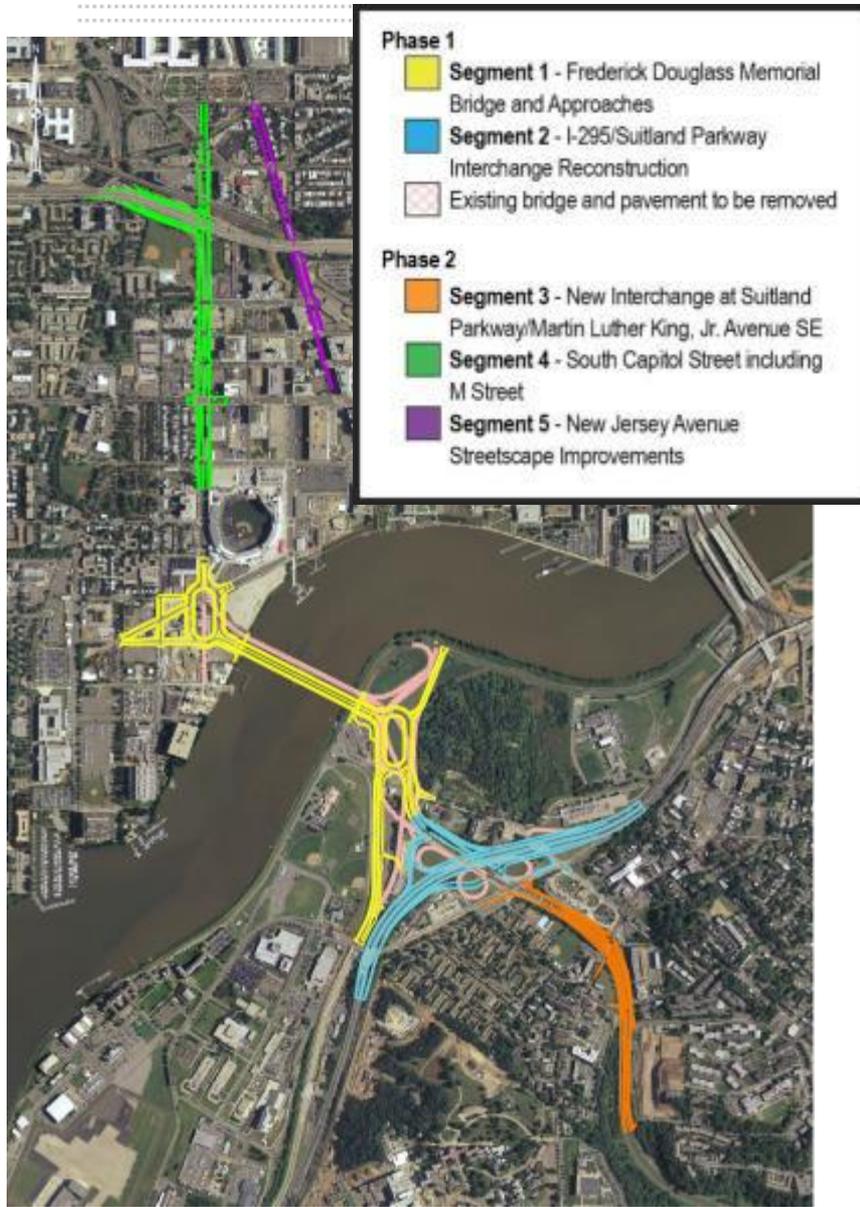
Continuing preliminary design and procuring Phase I design-build construction

**Cost:**

\$1.083 Billion (Phase I & Phase II)

**Phase I Schedule:**

Notify Short-Listed Contactor Teams	January 2014
Issue Request for Proposals	Fall 2014
Receive Technical Proposals	Fall 2014
Select Design-Build Team	Spring 2015
Issue Notice to Proceed	Summer 2015
Phase I Completion	Winter 2018-19



# 11<sup>th</sup> Street Bridge Project

## Goals:

- Increase mobility via separate freeway and local traffic connections
- Provide a shared-use path for pedestrians and bicyclists
- Replace functionally deficient, structurally obsolete bridges
- Provide additional alternate evacuation route
- Include new trail connections, improved drainage and other environmental investments

## Status:

Phase I completed in September 2013, Phase II currently under construction

## Cost:

\$460 Million (Phase I & Phase II)

## Overall Schedule:

<b>Advertised for Construction</b>	<b>Spring 2009</b>
<b>Began Construction</b>	<b>December 2009</b>
<b>Phase I Completion</b>	<b>September 2013</b>
<b>Phase II Completion</b>	<b>Fall 2015</b>



## Awards:

The 11<sup>th</sup> Street Bridge Project has been the recipient of 12 industry awards, including:

- *America's Transportation Award in the Large Project category*  
by American Association of State Highway and Transportation Officials (AASHTO)
- *Excellence in Environmental Streamlining*  
by Federal Highway Administration
- *#1 on 2012 Top Bridges List*  
by Roads and Bridges magazine
- *2013 Sustainability Award*  
by American Society of Civil Engineers (ASCE) National Capitol Section

**Muhammed Khalid, P.E.**

**Interim Chief Engineer**

**District Department of Transportation**

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